

REMARKS

I. Introduction

Pending claims 1, 3-5 and 7-16 have been examined and are rejected. Applicants overcome the claim rejections as follows.

II. Claim Rejections

Claims 1 and 4

Claims 1 and 4 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Swain, U.S. Patent No. 5,446,114 (hereinafter "Swain").

Applicants amend claim 1 to incorporate the subject matter of claim 3. Similarly, Applicants amend claim 4 to incorporate the subject matter of claim 7. Therefore, claims 3 and 7 are canceled to avoid redundancy. Furthermore, claim 8 is amended to correct its dependency.

As amended, claim 1 requires that "a mechanism associated with said roll retainer shaft is actuated by a rotating action of a mechanism associated with said roll loading shaft to move said rolls along said roll retainer shaft" (*see also* claim 4). In this manner, a roll supply carriage does not require a special drive mechanism and can instead be actuated from an apparatus to which the rolls are to be transferred (*see* Applicants' specification: page 2, lines 18-24).

The Examiner acknowledges that Swain fails to teach or suggest moving the rolls by rotation of said roll loading shaft. However, the Examiner alleges that Van Breen makes up for these deficiencies of Swain by teaching moving a plurality of rigid discs along a shaft by rotation of a ball screw located in the shaft (*see* Van Breen: Fig. 1). The Examiner concludes that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to

modify the roll moving methods taught by Swain with the methods taught by Van Breen in order to move the rolls without needing a separate handler, thereby simplifying the system by doing away with the secondary handling device (*see* Office Action: page 4). Applicants disagree.

Swain merely describes that a button at the end of a mandrel assembly 10 can be depressed and twisted to lock or unlock a shaft 16 from a “load” position (Swain: col. 5, lines 27-29). This locking/unlocking of shaft 16 does not cause the rolls to move along the loading mandrel 110. Thus, as noted above, the Examiner acknowledges that Swain fails to teach or suggest that “a mechanism associated with said roll retainer shaft is actuated by a rotating action of a mechanism associated with said roll loading shaft to move said rolls along said roll retainer shaft”, as recited in claim 1 (*see also* claim 4).

The Examiner alleges that Van Breen makes up for these deficiencies of Swain by teaching moving a plurality of rigid discs along a shaft by rotation of a ball screw located in the shaft (*see* Office Action: page 4). To the contrary, the apparatus/method of Van Breen involves a single shaft, *i.e.*, hollow cylindrical member 12 (Van Breen: Fig. 1). Thus, Van Breen relates to the stacking/unstacking of discs on a single shaft (*see* Van Breen: Abstract) and not to the transferring of discs from one shaft to another shaft. Consequently, the Examiner fails to provide any reasonable suggestion or motivation from the references themselves or the knowledge that was generally available to one of ordinary skill in the art, and without impermissible hindsight, for modifying Swain in the manner proposed.

Furthermore, in Van Breen, a motor 54 is connected to a lead screw 48 within the shaft 12 in order to rotate the lead screw, wherein the motor is actuated by a sensor detecting the

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presence or absence of a disc to thereby cause the discs to move upwardly or downwardly depending on the position of toggle switch 70 (Van Breen: col. 3, lines 3-65). Thus, Van Breen fails to make up for the deficiencies of Swain because Van Breen also fails to teach or suggest "a mechanism associated with said roll retainer shaft is actuated by a rotating action of a mechanism associated with said roll loading shaft to move said rolls along said roll retainer shaft", as recited in claim 1 (*see also* claim 4).

For at least the above exemplary reasons, claims 1 and 4 are patentable over Swain and Van Breen, either alone or in combination.

Claims 3 and 7

Claims 3 and 7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Swain, as applied to claims 1 and 4, and further in view of Van Breen, U.S. Patent No. 4,290,734 (hereinafter "Van Breen"). As noted above, the subject matter of claims 3 and 7 is incorporated into claims 1 and 4, respectively, and claims 3 and 7 are canceled.

Claims 5 and 8-10

Claims 5 and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Swain, as applied to claims 1 and 4, and further in view of Rauh, U.S. Patent No. 4,953,805 (hereinafter "Rauh"). Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Swain and Van Breen, as applied to claim 7, and further in view of Schlitz, U.S. Patent No. 1,907,447 (hereinafter "Schlitz"). Since the deficiencies of Swain and Van Breen, as set forth above with respect to claims 1 and 4, are not cured by Rauh and/or Schlitz,

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claims 5 and 8-10 are patentable over a reasonable combination, if any, of the applied references, at least by virtue of their dependency.

Claims 11-16

Claims 11-14 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Read, U.S. Patent No. 4,557,515 (hereinafter "Read"), in view of Swain. Claim 15 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Read and Swain, as applied to claim 11, and further in view of Van Breen. Claim 16 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Read and Swain, as applied to claim 11, and further in view of Van Breen and Sano et al., Japanese Patent Publication No. 07-034759 (hereinafter "Sano").

Applicants amend claim 11 to further clarify that a moving mechanism of the recited roll supply carriage "is operable to be actuated by a rotating action of a driving mechanism associated with a roll loading shaft toward which said roll is moved". Because Read and Swain, either alone or in combination, fail to teach or suggest these features, claim 11 is patentable over a reasonable combination, if any, of Read and Swain. Consequently, claims 12-14 are patentable, at least by virtue of their dependency. Furthermore, since the deficiencies of Read and Swain, as set forth above with respect to claim 11, are not cured by Van Breen or Sano, claims 15 and 16 are patentable over a reasonable combination, if any, of the applied references, at least by virtue of their dependency.


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III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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